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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,728	02/10/2004	Bret O. Baynham	2380.006	2819

21917 7590 07/20/2006

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EXAMINER

CUMBERLEDGE, JERRY L

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,728

Applicant(s)

BAYNHAM ET AL.

Examiner

Jerry Cumberledge

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/08/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to because in Fig. 3 there is a line pointing to the drawing that is not labeled with a reference character.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 5 is objected to because of the following informalities: In line 9, "tensioer" should be changed to --tensioner--.

Claim 7 is objected to because of the following informalities: In line 1, "ins" should be changed to --in--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, line 14, the phrase "... a slot connected to said bore..." is recited. It is unclear whether this bore is the cable bore in the permanent clamp or the bore through the provisional clamp. It appears that the applicant intends the slot to be through the bore of the provisional clamp, and that interpretation will be used through this office action.

In claim 20, line 2, the phrase "...with said bore aligned..." is recited. It is unclear whether this bore is the cable bore in the permanent clamp or the bore through the provisional clamp.

Claim 20 recites the limitation "said aperture" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "said working end" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Golds et al. (US Pat. 5,356,412).

Golds et al. disclose a surgical cable system comprising a surgical cable (top Fig. 11, below) with a permanent clamp (top Fig. 11, below) on one end and a free end (top Fig. 11, below), the permanent clamp having a cable bore (top Fig. 11, below) and a stop (top Fig. 11, below), the stop having a first position and a second position (column 7, lines 60-63). The cable system has a lateral bore (top Fig. 11, below) intersecting the cable bore and a mandrel (top Fig. 11, below) in the lateral bore. The cable comprises a multifilament cable (column 3, lines 67-68 and column 4, line 1).

Golds et al. further disclose a provisional clamp comprising a bore (bottom Fig. 11, below) and a mechanism (bottom Fig. 11, below) capable of contacting the cable to permit advancement of the free end and to prevent retrograde movement thereof. The mechanism can be considered to be the walls of the clamp that are next to the bore. The walls of the clamp allow the cable to pass through when the cable proceeds through the middle of the bore and does not engage the walls. If the cable is moving in a retrograde direction, the walls of the clamp would be capable of stopping the

Art Unit: 3733

retrograde motion through friction, if the walls and the cable come into contact with each other. The provisional clamp further comprises a slot (bottom Fig. 11, below) connected to the bore and a roller bearing in the slot (bottom Fig. 11, below), the roller bearing being spring biased. The roller bearing can be considered to be spring biased. A definition of spring, according to The American Heritage Dictionary of the English Language: Fourth Edition, is "a warping, bending, or cracking, as that caused by excessive force." The roller bearing can be considered to be spring biased, since the pins 92 (bottom Fig. 11, below) of the roller bearing warp the cable (column 7, lines 57-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Golds et al. (US Pat. 5,356,412).

Golds et al. disclose the claimed invention, except for the cable being constructed out of 100 to 150 filaments and the system having two clamps, a provisional clamp and a permanent clamp.

With regard to claim 9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the cable of Golds et al. with 100

Art Unit: 3733

to 150 filaments, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 10 and 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the surgical cable system of Golds et al. with two clamps, a provisional and a permanent, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The provisional and the permanent clamps of the claimed invention can be considered to be two of the clamps of Golds et al., which can be used at the same time.

Claims 1-23, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Golds et al. (US Pat. 5,356,412) in view of Cohen (US Pub. 2002/0072753 A1).

Golds et al. disclose the claimed invention, except for a tensioner instrument comprising a shaft with a cable guide, a handle end, and a cable chuck, the chuck slidably mounted on the shaft, and a cable; a clutch mechanism connected to the cable chuck, the clutch mechanism moving with the cable chuck; the surgical cable system comprising pivoting hand grips attached at the handle end to the cable chuck and the shaft and the clutch further comprising a passage intersected by a spring loaded clutch and the cable passing through the passage.

Cohen discloses a tensioner instrument comprising a shaft (Fig. 9 below) with a cable guide (Fig. 9 below), a handle end (Fig. 9 below), and a cable chuck (Fig. 9 below), the chuck slidably mounted on the shaft, and a cable ("E", Fig. 9 below). Cohen further discloses a clutch mechanism (Fig. 9 below) connected to the cable chuck, the clutch mechanism moving with the cable chuck. Cohen further discloses the surgical cables system comprising pivoting hand grips (Fig. 2 below) attached at the handle end to the cable chuck and the shaft. The clutch further comprises a passage (Fig. 9 below) intersected by a spring loaded clutch (Fig. 9 below) (paragraph 0032, lines 15-17) and the cable passing through the passage. This device is used to tension wires during surgery (paragraph 0006, lines 9-10).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the surgical cable system of Golds et al. by adding the tensioner of Cohen, in order to tension the cable of the system (paragraph 0006, lines 9-10).

The surgical cable system of Golds et al. as modified by Cohen is capable of performing a method with steps of providing a surgical cable having a free end and a permanent clamp on the other end, looping the cable around skeletal bones, passing the free end through the permanent clamp, passing the free end through a provisional clamp, passing the free end through a manually operated tensioner, manipulating the tensioner to put tension on the cable and draw the free end through the permanent clamp and the provisional clamp, reducing the loop, the provisional clamp automatically permitting passage of the cable in one direction, operating a stop in the permanent

Art Unit: 3733

clamp when the bones are in a predetermined spatial relationship whereby the cable is crimped and the size of the loop is set and the skeletal bones are fixed in the predetermined relationship; sequentially manipulating the tensioner to release the tension on the cable, moving the tensioner along the cable toward the permanent clamp and re-applying tension on the cable to draw the free end through the permanent clamp and further reduce the loop; removing the tensioner from the cable; manually releasing the tension in the provisional clamp and removing the provisional clamp from the cable; removing the tensioner from the cable, manually releasing the tension in the provisional clamp and removing the provisional clamp from the cable.

With regard to statements of intended use and other functional statements (i.e. ...for accepting said free end of said cable..., ...permitting advancement of said free end..., ...adapted to grasp...) they do not impose any structural limitations on the claims distinguishable over the surgical cable system of Golds et al as modified by Cohen, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Art Unit: 3733

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Cumberledge whose telephone number is (571) 272-2289. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLC



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER

